

STEM

Science | Technology
Engineering | Mathematics

WATER FILTER

THE ADVENTURE:

Build a water filter out of simple materials to get rid of big and small things that float in the water!

PLAN:

- Will you do this adventure inside, outside or at camp?
- What does a water filter do? Why would you need to use a water filter?
- What materials could you use to build a water filter?
- How are you going to clean up after you are done?
- How will you collect the filtered water?

Canadianpath.ca

RINGTAIL'S HOLLOW Environment & Outdoors



DO:

- Collect all of your materials.
- Carefully cut the bottom off a pop bottle. Use the top half to build your water filter.
- Explore different ways of putting the materials together to build a water filter. What materials should go on the bottom? The top?
- Test out your designs—which one works best?



the
Pond

Imperial



ExxonMobil



It starts with Scouts.

REVIEW:

- What do you know now that you did not know before? What did you learn from the other Beavers?
- How did you make your filter? Why did you use that design?
- How do you think you can use this filter in real life?
- What elements of STEM were in this adventure? Science? Technology? Engineering? Mathematics?
- What did you like about this adventure? What did you not like about the adventure? How would you do this adventure differently?

MATERIALS:

- Large or small pop bottles (one per Beaver)
- Materials for your filter could include: sand, dirt, gravel, pebbles, rocks and twigs
- Dirty water—do you have access to a pond, river or lake?
- Buckets to contain the mess if you are inside
- Scissors
- Tape

SAFETY TIP:

- This filter will not clean very small living creatures—called microbes—from the water, and you should not drink water from this water filter. What can you do to get rid of microbes that might be in the water?
- Plastic edges can be sharp. Ask for an adult's help when cutting your pop bottle, and then cover the edge with tape.

ONLINE RESOURCES:

- ZOOM Water Filter
- Homemade water filter